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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,261

09/19/2003

Douglas A. Narlow

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EXAMINER

SAUNDERS, PAUL

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/666,261

Applicant(s)

NARLOW, DOUGLAS A.

Examiner

Paul Saunders

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-12 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-12, 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-7, 9-12, 15-17 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2. **Claims 1-7, 10-12, 14-17** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The term "proximate" in **claims 1-7, 10-12, 14-17** is a relative term which renders the claim indefinite. The term "proximate" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "proximate" is not a standard of measurement wherein those of ordinary skill would individually reach similar definition. Therefore, the term "proximate" renders the claims indefinite.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-3, 14-17** rejected under 35 U.S.C. 103(a) as being unpatentable over
- i. Atick (US 6,111,517 A) in view of
 - ii. Desormeaux (US 4,812,872).

Regarding **claim 1**, Atick discloses an object recognition system (Title, Abstract, col. 1 lines 16-18, col. 2 line 14-col. 3 line 7) comprising: a camera 150 configured to capture said image of said human face (col. 3 lines 4-7, col. 4 line 1); and a computer configured to compare data representative of said image to stored image data (fig. 2 250, col. 5 lines 11-30).

Atick does not expressly disclose a visible light source; a light source controller configured to control an illumination level of said visible light source to achieve contrast on a human face to capture an image thereof.

Desormeaux discloses a visible light source 3; a light source controller 1 configured to control an illumination level (fig. 2, 3, 4 – fill flash or no flash) of said visible light source 3 to achieve contrast on a human face (col. 1 lines 22-26, 28-40 – fill flash is to illuminate areas of the subject that are too dark, as in lacking contrast) to capture an image thereof (fig. 2, 5). Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to further illuminate a subject lacking contrast taught by Desormeaux within the face recognition method taught by Atick in order to provide proper exposure of the subject (col. 1 lines 22-26, 28-40).

Regarding **claim 2**, Desormeaux further discloses the object recognition system of claim 1, wherein said light source controller is configured to establish a first illumination level (fill flash) for said visible light source when ambient light in an area proximate to said human face (fig. 1, 4 – ambient light sensor 5 detects the ambient light level in an area proximate to subject as light sensor 5 is part of the camera; further fig. 4 shows ambient light detected when camera to subject distance being 0 to infinity and thus teaches detecting ambient light in an area proximate to subject) is at a first ambient light level (greater than 500 f.-l.), and a second illumination level (no flash) for said visible light source when said ambient light is at a second ambient light level (less than 500 f.-l., but greater than 64 f.-l.), wherein said first illumination level is higher than said second illumination level (fill flash illumination is greater than no flash illumination), and wherein said first ambient light level is higher than said second ambient light level (500 f.-l. is greater than 64 f.-l.).

Regarding **claim 3**, Desormeaux further discloses the object recognition system of claim 1, wherein said light source controller comprises a light sensor 5, and wherein said light source controller is configured to control an illumination level of said visible light source in response to a level of ambient light imparted on said light sensor (fig. 2, 3, 4, 5, col. 3 lines 11-13).

Regarding **claim 14**, Atick discloses a method of controlling access of a person to a secure area (Title, Abstract, col. 1 lines 16-18, col. 2 line 14-col. 3 line 7), said method comprising: operating a camera 150 to capture an image of at least a portion of said face (col. 3 lines 4-7, col. 4 line 1); comparing data representative of said image to stored image data (fig. 2 250, col. 5 lines 11-30); and allowing access of said person to said secure area in response to said comparing of said image to said stored image data (fig. 3B 355, col. 3 line 49-col. 4 line 2, col. 6 lines 13-30 – access to secure area being access to a restricted computer system area).

Atick does not expressly disclose detecting an ambient light level in an area proximate to a face of said person; setting an illumination level for said face, the illumination level sufficient to achieve contrast on said face to capture an image thereof; illuminating said face at said illumination level.

Desormeaux discloses detecting an ambient light level in an area proximate to a subject (fig. 1, 4 – ambient light sensor 5 detects the ambient light level in an area proximate to subject as light sensor 5 is part of the camera; further fig. 4 shows ambient light detected when camera to subject distance being 0 to infinity and thus teaches detecting ambient light in an area proximate to subject); setting an illumination level for the subject (fig. 2, 3, 4 – fill flash or no flash), the illumination level sufficient to achieve contrast on the subject to capture an image thereof (col. 1 lines 22-26, 28-40 – fill flash is to illuminate areas of the subject that are too dark, as in lacking contrast); illuminating the

subject at said illumination level (fig. 5, col. 4 lines 41-52). Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to further illuminate a subject lacking contrast taught by Desormeaux within the method of controlling access taught by Atick in order to provide proper exposure of the subject (col. 1 lines 22-26, 28-40).

Regarding **claim 15**, Desormeaux further discloses the method of claim 14, wherein said illumination level is set at a first level (fill flash) when said ambient light level (fig. 3, 4, 5) is greater than a predetermined light level (fig. 2, 3 – a predetermined light level being 500 f.-l.).

Regarding **claim 16**, Desormeaux further discloses the method of claim 15, wherein said illumination level is set at a second level (no flash) when said ambient light level (fig. 3, 4, 5) is less than said predetermined light level (fig. 2, 3 – a predetermined light level being 500 f.-l.).

Regarding **claim 17**, Desormeaux further discloses the method of claim 16, wherein said first level is greater than said second level (fig. 5 – fill flash is greater than no flash, T_1 is greater than T_0).

6. **Claims 4-7** rejected under 35 U.S.C. 103(a) as being unpatentable over
 - i. Atick (US 6,111,517 A) in view of

ii. Desormeaux (US 4,812,872)

as applied to claim 3 above, and further in view of

iii. Morrow (US 2,913,636).

Regarding **claim 4**, Atick in view of Desormeaux remains silent on the object recognition system of claim 3, wherein said light source controller comprises a switch and wherein said level of said ambient light imparted on said light sensor controls a state of said switch to control said illumination level of said light source.

Morrow discloses said light source controller (fig. 1) comprises a switch 31 and wherein said level of said ambient light imparted on said light sensor 10 controls a state of said switch 31 to control said illumination level of said light source (col. 1 lines 34-36, col. 2 lines 21-28). Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to construct the light source controller taught by Desormeaux, as taught by Morrow in order to construct an automatic light source controller (Morrow col. 1 lines 16-19).

Regarding **claim 5**, Atick in view of Desormeaux remains silent on the object recognition system of claim 4, wherein said controller further comprises at least one relay, and wherein said state of said switch controls a state of said at least one relay to control said illumination level of said light source.

Morrow further discloses said controller (fig. 1) further comprises at least one relay 33, and wherein said state of said switch 31 controls a state of said at

least one relay 33 to control said illumination level of said light source (col. 1 lines 34-36, col. 2 lines 21-28).

Regarding **claim 6**, Atick in view of Desormeaux remains silent on the object recognition system of claim 4, wherein said controller further comprises a dimmer, and wherein said state of said switch controls a resistance of said dimmer to control said illumination level of said light source.

Morrow further discloses said controller (fig. 1) further comprises a dimmer (col. 2 lines 43-45), and wherein said state of said switch 31 controls a resistance of said dimmer to control said illumination level of said light source (col. 1 lines 34-36, col. 2 lines 21-28).

Regarding **claim 7**, Atick in view of Desormeaux remains silent on the object recognition system of claim 4, wherein said switch comprises a transistor.

Morrow further discloses said switch 31 comprises a transistor (fig. 1, col. 1 lines 14-15).

7. **Claims 9-12** rejected under 35 U.S.C. 103(a) as being unpatentable over
- i. Desormeaux (US 4,812,872) in view of
 - ii. Atick (US 6,111,517 A).

Regarding **claim 9**, Desormeaux discloses a method of illuminating a subject, said method comprising: controlling an illumination level (fig. 2, 3, 4 – fill

flash or no flash) of a visible light source 3 directed toward said subject to achieve contrast on said subject (col. 1 lines 22-26, 28-40 – fill flash is to illuminate areas of the subject that are too dark, as in lacking contrast) to capture an image thereof (fig. 2, 5).

Desormeaux does not expressly disclose a method of illuminating a human face in an object recognition system.

Atick discloses a human face object recognition system (Title, Abstract, col. 1 lines 16-18, col. 2 line 14-col. 3 line 7). Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to incorporate a human face object recognition system taught by Atick as part of the subject illumination method taught by Desormeaux in order to provide "swift initial access to a computer system" (col. 2 lines 42-44).

Regarding **claim 10**, Desormeaux further discloses the method of claim 9, wherein said illumination level of said visible light source 3 is controlled to achieve a first level (fill flash) when an ambient light level in an area proximate to said human face (fig. 1, 4 – ambient light sensor 5 detects the ambient light level in an area proximate to subject as light sensor 5 is part of the camera; further fig. 4 shows ambient light detected when camera to subject distance being 0 to infinity and thus teaches detecting ambient light in an area proximate to subject) is greater than a predetermined light level (fig. 2, 3 – a predetermined light level being 500 f.-l.).

Regarding **claim 11**, Desormeaux further discloses the method of claim 10, wherein said illumination level of said visible light source is controlled to achieve a second level when said ambient light level is less than said predetermined light level.

Regarding **claim 12**, Desormeaux further discloses the method of claim 11, wherein said first level is greater than said second level (fig. 5 – fill flash is greater than no flash, T_1 is greater than T_0).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Khan (US 2003/0210336 A1) teaches face recognition of images of faces with proper contrast for secure access.

Tokuda (US 4,317,070) teaches a light source controller using detected ambient light.

Aoki (US 5,909,245 A) teaches a light source controller matching illumination level to ambient light level by way of color temperature measurement.

Sato (US 7,248,721 B2) teaches facial identification detecting if contrast is appropriate for identification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Saunders whose telephone number is 571.270.3319. The examiner can normally be reached on Mon-Thur 9am-4pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on 571.272.7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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IPST 


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SUPERVISORY PATENT EXAMINER